



[4910-13-P]

## **DEPARTMENT OF TRANSPORTATION**

### **Federal Aviation Administration**

#### **14 CFR Part 39**

**[Docket No. FAA-2013-0705; Directorate Identifier 2013-NM-052-AD]**

**RIN 2120-AA64**

**Airworthiness Directives; Bombardier, Inc. Airplanes**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for certain Bombardier, Inc. Model BD-700-1A10 airplanes. This proposed AD was prompted by a report that the manufacturer has determined that some completion centers used the heater/brake monitoring unit (HBMU) logic circuit to control the line voltage of the drain mast heaters. Since the drain mast heaters are connected in parallel with the number 2 pitot static (PS) probe heater circuit, a number 2 PS probe heater failure may not be detected by the fault monitoring capabilities of the HBMU. This proposed AD would require a modification of the air data probes and sensors. We are proposing this AD to detect and correct an unannunciated failure of two PS probe heaters, which could affect controllability of the airplane in icing conditions.

**DATES:** We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: (202) 493-2251.
- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.
- Hand Delivery: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

#### **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the MCAI, the regulatory evaluation, any comments received, and other information. The street

address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

**FOR FURTHER INFORMATION CONTACT:** Assata Dessaline, Aerospace Engineer, Avionics and Flight Test Branch, ANE-172, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7301; fax (516) 794-5531.

**SUPPLEMENTARY INFORMATION:**

**Comments Invited**

We invite you to send any written relevant data, views, or arguments about this proposed AD. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2013-0705; Directorate Identifier 2013-NM-052-AD” at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD based on those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

**Discussion**

Transport Canada Civil Aviation (TCCA), which is the aviation authority for Canada, has issued Canadian Airworthiness Directive CF-2012-32, dated

December 13, 2013 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products.

The MCAI states:

The aeroplane manufacturer has determined that some completion centers used the Heater/Brake Monitoring Unit (HBMU) logic circuit to control the line voltage of the drain mast heaters. This same logic circuit is also used to control the line voltage of the number 2 pitot static (PS) probe heater. Since the drain mast heaters are connected in parallel with the number 2 PS probe heater circuit, a number 2 PS probe heater failure may not be detected by the fault monitoring capabilities of the HBMU.

The unannounced failure of two PS probe heaters could adversely affect the aeroplane’s flight characteristics in icing conditions.

This [Canadian] AD mandates a modification to the existing drain mast heater wiring to correct the fault-monitoring capabilities of the HBMU and eliminate the potential dormant failure of the number 2 PS probe heater.

You may obtain further information by examining the MCAI in the AD docket.

#### **Relevant Service Information**

Bombardier, Inc. has issued Service Bulletin 700-30-021, Revision 01, dated November 21, 2012. The actions described in this service information are intended to correct the unsafe condition identified in the MCAI.

#### **FAA’s Determination and Requirements of This Proposed AD**

This product has been approved by the aviation authority of another country, and is approved for operation in the United States. Pursuant to our bilateral agreement with the State of Design Authority, we have been notified of the unsafe condition described in

the MCAI and service information referenced above. We are proposing this AD because we evaluated all pertinent information and determined an unsafe condition exists and is likely to exist or develop on other products of the same type design.

#### **Differences Between This Proposed AD and the MCAI or Service Information**

This AD applies only to airplanes that have been modified by any FAA supplemental type certificate (STC) specified in table 1 of paragraph 1.A., “Effectivity,” of Bombardier Service Bulletin 700-30-021, Revision 01, dated November 21, 2012.

#### **Costs of Compliance**

We estimate that this proposed AD affects 32 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor cost</b>	<b>Parts cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Modification	35 work-hours X \$85 per hour =	\$0	\$2,975	\$95,200

#### **Authority for This Rulemaking**

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. “Subtitle VII: Aviation Programs,” describes in more detail the scope of the Agency’s authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress

charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### **Regulatory Findings**

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this proposed AD and placed it in the AD docket.

### **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **The Proposed Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new AD:

**Bombardier, Inc.:** Docket No. FAA-2013-0705; Directorate Identifier 2013-NM-052-AD.

#### **(a) Comments Due Date**

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

#### **(b) Affected ADs**

None.

#### **(c) Applicability**

(1) This AD applies to Bombardier, Inc. Model BD-700-1A10 airplanes, certificated in any category, equipped with any electrical wiring heater current/brake temperature monitor unit (HBMU) installed in accordance with any FAA supplemental type certificate specified in table 1 of paragraph 1.A., “Effectivity,” of Bombardier Service Bulletin 700-30-021, Revision 01, dated November 21, 2012.

(2) For airplanes on which the applicable service request for product support action (SRPSA) specified in table 3 and table 4 of paragraph 1.A., “Effectivity,” of Bombardier Service Bulletin 700-30-021, Revision 01, dated November 21, 2012, has been incorporated, the requirements of this AD have been met.

**(d) Subject**

Air Transport Association (ATA) of America Code 30, Ice and Rain Protection.

**(e) Reason**

This AD was prompted by a report that the manufacturer has determined that some completion centers used the HBMU logic circuit to control the line voltage of the drain mast heaters. This same logic circuit is also used to control the line voltage of the number 2 pitot static (PS) probe heater. Since the drain mast heaters are connected in parallel with the number 2 PS probe heater circuit, a number 2 PS probe heater failure may not be detected by the fault monitoring capabilities of the HBMU. We are issuing this AD to detect and correct an unannunciated failure of two PS probe heaters, which could affect controllability of the airplane in icing conditions.

**(f) Compliance**

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

**(g) Modification**

Within 800 flight hours or 15 months after the effective date of this AD, whichever occurs first: Modify the air data probes and sensors, in accordance with the



Accomplishment Instructions of Bombardier Service Bulletin 700-30-021, Revision 01, dated November 21, 2012.

**(h) Credit for Previous Actions**

This paragraph provides credit for actions required by paragraph (g) of this AD, if those actions were performed before the effective date of this AD using Bombardier Service Bulletin 700-30-021, dated August 28, 2012.

**(i) Other FAA AD Provisions**

The following provisions also apply to this AD:

**(1) Alternative Methods of Compliance (AMOCs):** The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

**(2) Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of

Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

**(j) Related Information**

(1) Refer to Mandatory Continuing Airworthiness Information (MCAI) Canadian Airworthiness Directive CF-2012-32, dated December 13, 2012. The MCAI can be found in the AD docket on the Internet at <http://www.regulations.gov>.

(2) For service information identified in this AD, contact Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; email [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>. You may review copies of the referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. Issued in Renton, Washington, on August 30, 2013.

Stephen P. Boyd,  
Acting Manager,  
Transport Airplane Directorate,  
Aircraft Certification Service.

[FR Doc. 2013-22145 Filed 09/10/2013 at 8:45 am; Publication Date: 09/11/2013]